

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of depositing a MCrAlY-coating on the surface of a single crystal or directionally solidified article, the method comprising the steps of:

(a) ~~coating~~ depositing the MCrAlY-coating on the surface of the article only at a local area ~~with the MCrAlY-coating;~~ and

(b) subsequently to step (a), converting the deposited MCrAlY-coating ~~in~~ into a single crystal form coating which is epitaxial with the base single crystal or directionally solidified material of the article.

2. (Currently Amended) The method according to claim 1, wherein during step ~~(1) of the claim 1~~ (a), the article is coated ~~locally~~ at the local area by an ~~electroplated~~ electroplating method.

3. (Currently Amended) The method according to claim 1, wherein during step ~~(a) of the claim 1~~, the article is coated ~~locally~~ at the local area by a slurry process, a plasma spray process, electron beam physical vapor deposition, or by sputtering ~~or any other process used for coating of MCrAlY-coating.~~

4. (Currently Amended) The method according to claim 1, wherein during step (a) ~~of the claim 1~~, the article is coated ~~locally~~ at the local area with the MCrAlY-coating which is a γ/γ' MCrAlY-coating or ~~with~~ a γ/β MCrAlY-coating.

5. (Currently Amended) The method according to claim 1, wherein the deposited MCrAlY-coating is converted ~~in~~ into a single crystal form coating by laser remelting.

6. (Currently Amended) The method according to claim 1, wherein during step (a) ~~of the method~~ the areas on the surface that are not to be coated with the MCrAlY-coating are masked with a masked material.

7. (Currently Amended) The method according to claim 6, wherein the areas on the surface that are not to be coated with the MCrAlY-coating are masked with wax or organic polymers.

8. (Previously Presented) The method according to claim 1, wherein the steps (a) and (b) are repeated at different local areas on the surface of the article.

9. (Currently Amended) The method according to claim 1, wherein the step (a) is repeated at different local areas on the surface of the article before the conversion of the deposited MCrAlY-coating ~~in~~ into a single crystal form coating which is epitaxial with the single crystal or directionally solidified material of the article.

10. (Currently Amended) The method according to claim 8, wherein the different local areas on the surface of the article are coated with different MCrAlY-coatings, the different MCrAlY-coatings are selected according to the required properties in said local areas in respect to one or a combination of oxidation, corrosion, and thermal mechanical fatigue.

11. (Previously Presented) The method according to claim 1, wherein the method is used as a repair process for a used MCrAlY-coating.

12. (Currently Amended) The method according to claim 1, wherein a gas turbine article ~~such as blades or vanes~~ is coated.

13. (New) The method according to claim 1, wherein a blade or vane is coated.

14. (New) A method of depositing a MCrAlY-coating on the surface of a single crystal turbine article, the method comprising the steps of:

(a) depositing the MCrAlY-coating on the surface of the turbine article only at a local area, the deposited MCrAlY-coating being polycrystalline; and

(b) subsequently to step (a), converting the deposited polycrystalline MCrAlY-coating into a single crystal coating which is epitaxial with the single crystal material of the turbine article by laser remelting.

15. (New) The method according to claim 14, wherein during step (a), the article is coated at the local area by an electroplating method.

16. (New) The method according to claim 14, wherein during step (a), the article is coated at the local area by a plasma spray process.

17. (New) The method according to claim 14, wherein during step (a), the article is coated at the local area with the MCrAlY-coating which is a γ/γ' MCrAlY-coating or a γ/β MCrAlY-coating.

18. (New) The method according to claim 14, wherein during step (a), the areas on the surface that are not to be coated with the MCrAlY-coating are masked with a masked material.

19. (New) The method according to claim 14, wherein:
the steps (a) and (b) are repeated at different local areas on the surface of the article;
the different local areas are coated with different MCrAlY-coatings; and
the different MCrAlY-coatings are selected according to the required properties in the local areas in respect to one or a combination of oxidation, corrosion, and thermal mechanical fatigue.

20. (New) The method according to claim 14, wherein the step (a) is repeated at different local areas on the surface of the article before the conversion of the deposited MCrAlY-coating into a single crystal coating which is epitaxial with the single crystal material of the article.